

**How the U.S. Economic Output Recession of
2007-2009 Led to the Great Recession in Labor
Markets: The Role of Corporate Job Downsizing,
Work Hour Reductions, Labor Productivity
Gains, and Rising Corporate Profits**

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Introduction

The U.S. economy entered into a recession at the very end of calendar year 2007 that has had a profound effect on the nation's workers, sharply reducing employment levels, increasing the national unemployment rate above 10% by the end of 2009, and driving up the number of underemployed and the hidden unemployed. While real aggregate output as measured by the nation's Gross Domestic Product (GDP) bottomed out in the second quarter of calendar year 2009, the National Bureau of Economic Research, the official arbiter of business cycle dating, has not yet identified the ending date of the recession. In contrast to the recent recovery of product output growth, labor markets continued to deteriorate through the end of calendar year 2009 with only a modest improvement in the first quarter of 2010. The recession of 2007-2009 was converted into a Great Recession for U.S. workers. To explain how this came about is the purpose of this paper. Substantial shedding of employees and cuts in weekly hours of work by corporations allowed labor productivity to rise sharply after 2008. None of these productivity gains were shared by wage and salary workers in the form of higher real weekly earnings. These productivity gains were used to raise corporate profits at a higher relative rate than in any other post-World War II recession.

The Path of Real Output and Labor Market Developments From 2007 IV to 2010 I

The recession of 2007-2009 began in December 2007 when the cyclical peak of the previous comparisons occurred according to the National Bureau of Economic Research. Changes in the nation's real GDP from the fourth quarter of 2007 to the first quarter of 2010 are displayed in Table 1. Real annualized output (in 2005 prices) fell from \$13.363 trillion in the fourth quarter of 2007 to \$12.861 trillion in the second quarter of 2009 before resuming growth. The decline in real GDP from the previous cyclical peak (2007 IV) to the trough quarter in the second quarter of 2009 was \$553 billion or 4.1%. This was the largest relative decline in real GDP from peak to trough in any of the nation's previous 10 post-WWII recessions. The recessions of 1973-75 and 1957-58 were characterized by a 3.2% decline in real GDP from peak to trough.

Following the second quarter of 2009, real GDP has risen for the last three consecutive quarters reaching \$13.139 trillion in the first quarter of this year, a gain of 2.6% over the past

nine months. Real annualized GDP in the first quarter of 2010 was still \$224 billion below its peak in the fourth quarter of 2007

Table 1:
Trends in Real Gross Domestic Product in the U.S. At Annualized Rates By Selected Quarters
From 2007 IV to 2010 I (in Billions of Chained 2005 Dollars)

Quarter	Real GDP (in billions)
2007 IV	\$13,363 (cyclical peak)
2008 IV	\$12,994
2009 II	\$12,810 (cyclical trough)
2009 III	\$12,861
2009 IV	\$13,019
2010 I	\$13,139
Time Period	Percent Change in Real GDP
2007 IV – 2009 II	-4.1%
2007 IV – 2009 IV	-2.5%
2009 II – 2010 I	+2.6%
2007 IV – 2010 I	-1.7%

Over the 2007 IV – 2009 IV period, real GDP was down by only 2.5%; however, labor market conditions on a wide variety of fronts had deteriorated much more considerably (Table 2). Over this two year period, nonfarm payroll employment had declined by 8.2 million or 6.0%. Total civilian employment (including the self-employed) had dropped by 8.04 million or 5.5%. Average (mean) weekly hours of work in the private sector fell by .8 hours or 2.3%, and the number of workers reporting themselves as employed part-time for economic reasons more than doubled from 4.53 million to 9.21 million. The nation’s civilian labor force fell by 414,000 over this two year period at a time when the U.S. Bureau of Labor Statistics had earlier projected that it would rise by more than 3 million.¹ The steep decline in employment drove up the official unemployment rate from 4.8% in 2007 IV to 10.0% in the fourth quarter of 2009, a more than doubling. Adding in the 9.2 million underemployed and the 5.7 million members of the labor force reserve or “hidden unemployed” in the fourth quarter of 2009 would have increased the underutilization rate to close to 19%.²

¹ See: U.S. Bureau of Labor Statistics, “Labor Force Projections to 2018,” BLS web site, tabulations by authors.

² The labor force reserve consists of those jobless individuals not actively looking for employment in the past 4 weeks who express a desire for immediate work.

Table 2:
Trends in Real Gross Domestic Product and Key Labor Market Outcomes in the U.S. Between
2007 IV and 2009 IV

Measure	(A) 2007 IV	(B) 2009 IV	(C) Absolute Change	(D) Percent Change
Real GDP (in billions)	13,363	13,019	-344	-2.5%
Nonfarm Payroll Employment (in millions)	137.862	129.639	-8.223	-6.0%
Civilian Employment (in millions)	146.181	138.138	-8.043	-5.5%
Mean Weekly Hours of Work in Private Sector	34.6	33.8	-.8	-2.3%
Employed Part-time for Economic Reasons (in millions)	4.528	9.210	4.682	+103%
Unemployment Rate (in %)	4.8	10.0	+5.2	+108%
Civilian Labor Force (in millions)	153.958	153.544	-414	-.3%

The Historically Unique National Trends in Corporate Profits Growth and Aggregate Wage and Salary Growth in the U.S.: 2008 IV to 2010 I

As noted above, the U.S. economy appears to have emerged from the Great Recession starting in the early summer of 2009 though the National Bureau of Economic Research has not yet issued an official ending date. The economic recovery in the U.S. over the past 15 months has seen the most lopsided gains in corporate profits relative to real wages and salaries in our history. Pre-tax corporate profits fell sharply (-18%) in 2008, but then they began to rise steadily and strongly after 2008 IV before the recession officially ended. By 2010 I, they were equal to \$1,567 billion or \$572 billion above their 2008 IV level (Table 3).

Table 3:
Trends in Nominal Corporate Profits Before Tax in the U.S. From 2008 IV to 2010 I (in Billions)

Quarter	Profits (in Billions)
2008 IV	\$995
2009 I	\$1,138
2009 II	\$1,178
2009 III	\$1,297
2009 IV	\$1,418
2010 I	\$1,567
Absolute Change From 2008 IV to 2010 I	+572 billion
Percent Change From 2008 IV to 2010 I	57.4%

These big run ups in corporate profits have led to an enormous rise in corporate cash on hand. These developments were spelled out in a recent Bloomberg Businessweek article in the July 12, 2010 issue titled “When Cash Takes A Vacation” by Robert Farzad. In early 2010, cash at the nation’s nonfinancial corporations stood at \$1.84 trillion, a 27% increase from early 2007. According to Moody’s, “As a percent of total company assets, cash is at its highest level in half a century.” The nation’s hedge funds also increased cash in their portfolios up to 24% of their assets in June 2010. This compared to 19% just three months earlier.

Corporate profits since the fourth quarter of 2008 have fared far better than wage and salary payments to workers over the past 15 months. Corporate profits rose by \$572 billion or 57% over the past 15 months while wage and salary payments to workers declined by \$121 billion or about 2%.

Table 4:
Comparisons of Growth/Decline in Corporate Profits (before tax) and Wage and Salary Accruals
Between 2008 IV and 2010 I

Category	Change From 2008 IV to 2010 I
Corporate Profits (before tax)	+\$572 billion 57%
Wage and Salary Accruals	-\$121 billion -2%

American companies have sacked workers and their aggregate hours relative to output at rates considerably higher than most other industrialized nations. For a given decline in GDP between 2007 IV and 2009 IV, American companies cut workers from their payrolls at a rate far higher than that of most other OECD countries, including Germany and Japan.³ From 2007 IV to 2009 IV, U.S. real GDP fell by slightly over 2%, yet payroll employment declined by 6%. Germany’s GDP fell by 4% yet its total employment rose slightly by .7% due to work sharing arrangements, labor hoarding, and government subsidies to keep workers on the payroll.

In the U.S., these steep declines in employment plus cuts in average weekly hours of work, including a sharp rise in underemployment (9 million underemployed in recent months)

³ “Hoard Instinct: The Nature of the Recession, not Government Schemes May Explain Why Some Countries Los So Few Jobs,” The Economist, July 8, 2010.

allowed labor productivity to rise sharply over the above 15 month period (2008 IV – 2010 I). Frontline workers, however, received no real weekly wage increases. The gains in labor productivity only went to raise corporate profits while workers got nothing except UI checks. Never before in postwar U.S. history did all of the national income gains over a 15 month period all go to corporate profits. The absence of job and real wage growth is reducing consumer confidence and the ability of households to spend, thereby holding down the economic recovery. We cannot count on further personal savings rate reductions to save the economy. Our personal savings rates are in fact too low for our long term economic health.

Changes in National Corporate Profits and Aggregate Wage and Salary Accruals From the Trough of the Great Recession Through the First Quarter of 2010

According to recent GDP estimates from the U.S. Commerce Department, the trough of the Great Recession of 2007-2009 appears to have been reached in the second quarter of 2009. Over the past three quarters, real GDP has been growing steadily but at a relatively modest pace. In the first quarter of this year, real GDP has been estimated to be growing at only a 2.7% pace.⁴

The growth of corporate profits before tax and aggregate wages and salaries in the U.S. from the trough cycle of the most recent recession through the third recovery quarter (2010 I) are displayed in Table 5. For comparative purposes, we also provide similar estimates on the growth of these two income measures during the same ninth month period for the previous four national recessions dating back to 1980.

⁴ This estimate is based on the “third” estimate of GDP growth during that quarter, see: U.S. Commerce Department, Bureau of Economic Analysis, Gross Domestic Product: First Quarter 2010 (Third Estimate), Washington, D.C., July 2010.

Table 5:
Changes in Corporate Profits Before Tax and Total Accrued Wages and Salaries From the
Trough Quarter of the Recession to Three Quarters Later, Past Five Recessions in the U.S., 1980
to 2007-2009 (in Billions)

Recession	(A) Corporate Profits Before Taxes	(B) Accrued Wages and Salaries	(C) Corporate Profits Change As Share of Total Profits and Wages Change
2007-2009	+388	+68	85%
2001	+93	+80	54%
1990-1991	-5	+78	0
1981-1982	+12	+108	10%
1980	+15	+148	9%

In the first nine months of recovery from the Great Recession, corporate profits before tax are estimated to have increased by \$388 billion while aggregate wage and salaries only \$68 billion higher than in the trough quarter. More than 85% of the gain in combined income for these two key categories of income went to corporate profits. This corporate profit share of income growth was a record high for the nation. The only one of the prior four recessions that came close to such an uneven balance in favor of corporate profits was the 2001 recession, which ended in November 2001. During the first three quarters of the recovery from that recession, corporate profits accounted for 54% of the combined growth in corporate profits and wage and salaries. In the recovery from the three prior recessions, corporate profits accounted for 10 percent or less of the combined growth in profits, wages, and salaries. The extraordinary corporate profit share of income growth in the current recovery has no historical counterpart. As America's workers might with justification claim, "We wuz robbed!" There was no worker reward for the increase in their labor productivity over the past 15 months.

The Sources of the Explosive Growth in Corporate Profits Between 2008 IV and 2010 I: Rising Labor Productivity, Declining Labor Input, and No Real Wage Growth

The substantial rise in annualized pre-tax corporate profits of \$461 billion between the fourth quarter of 2008 and the first quarter of 2010 could, in theory, have been generated by a combination of factors. These would include the following:

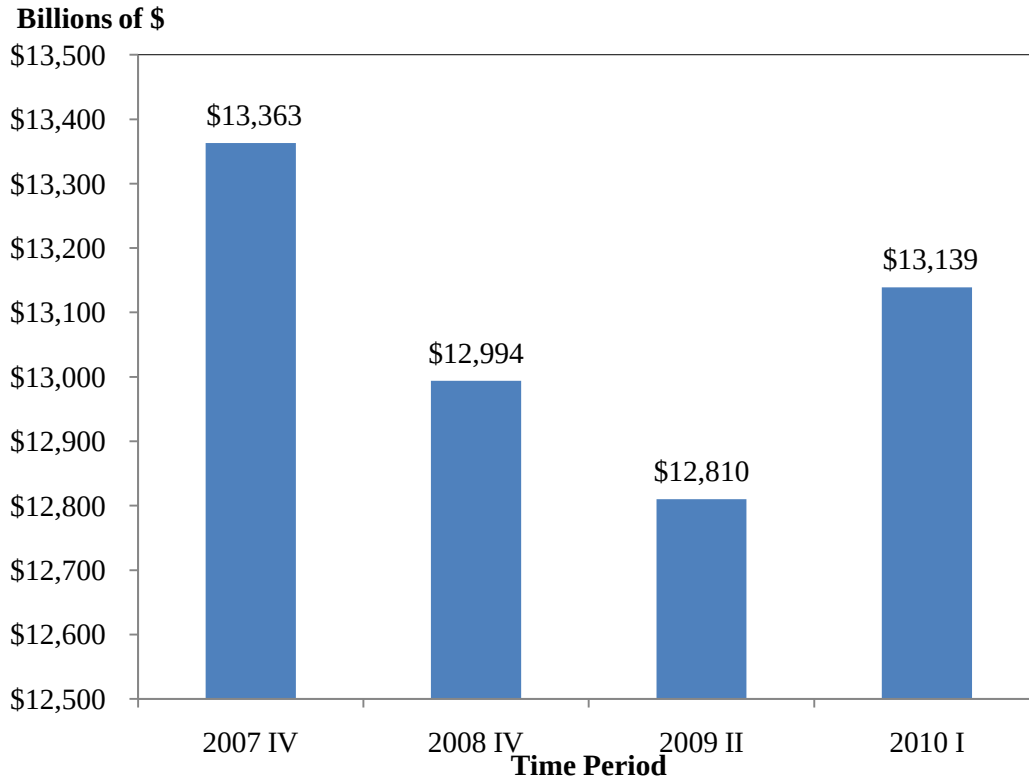
- A sharp rise in the level of real output of private sector businesses, holding profit margins on sales constant
- A reduction in nominal wages/salaries and employee benefits to workers and managers, holding labor productivity constant
- An increase in labor productivity (output per hour of labor) with no offsetting increase in their real wages or benefits
- A rise in prices for goods and services not offset by any additional labor or material costs

The primary cause of the rapid buildup in corporate profits over the above 15 month period (2008 IV to 2010 I) was a sharp increase in labor productivity that was not accompanied by any rise in real weekly wages and salaries. Real output appears to have grown very slowly (<1% for real GDP) over this time period. Private sector firms reduced both the number of workers on their payrolls and their average weekly hours of work, thereby increasing labor productivity by nearly 6.5%. None of this increase in labor productivity was shared with workers in the form of higher real weekly wages. Nearly all of the gains in labor productivity went to corporations in the form of higher pre-tax corporate profits.

Real GDP in the U.S. continued to fall from the end of 2008 through the second quarter of 2009 where it reached its cyclical trough. Real GDP has been estimated by the U.S. Bureau of Economic Analysis to have grown in each of the past three quarters, with real GDP in 2010 I being \$13.139 billion in constant 2005 dollars (see Table 1). This level of output was \$329 billion, or 2.6% higher than it was in 2009 II, but it was only \$145 billion or 1.1% higher than it was in the fourth quarter of 2008. Real output growth in the private sector did not grow as well over this 15 month period. Available data from the U.S. Bureau of Economic Analysis shows that real value added in the private non-financial sector was .1% below its level in 2008 IV.⁵

⁵ The Bureau of Economic Analysis has just released data on value added by private sector industries.

Chart 1:
Trends in Annualized Levels of Real Gross Domestic Product in the U.S. from
2007 IV to 2010 I (in Chained 2005 Dollars)



Private sector firms did, however, sharply reduce their employment levels and their average work week between 2008 IV and 2010 I.⁶ Over this time period, total payroll employment in the private nonfarm sector declined from 112.456 million to 107.20 million, a drop of 5.239 million or 4.7% (see Table 6). At the same time, average weekly hours of work in the private, nonfarm sector declined from 34.3 hours to slightly below 34.0 hours, a decline of about 1.0%.

⁶ In the first quarter of 2010, payroll employment (seasonally adjusted) rose slightly above its level in the fourth quarter of 2009.

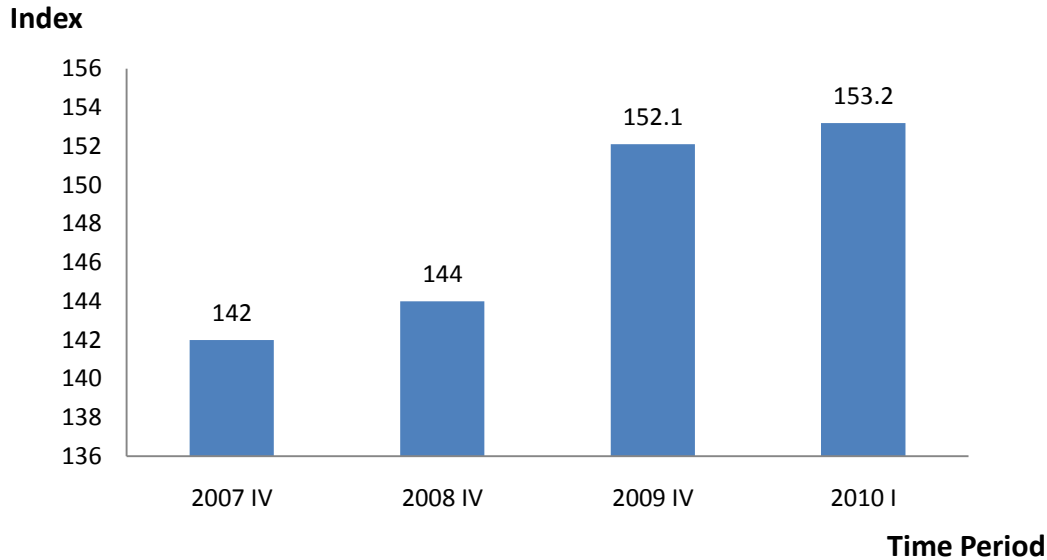
Table 6:
Changes in Payroll Employment in the Private Non-Farm Sector and in Average Weekly Hours
of Work for All Private Sector Wage and Salary Workers, 2008 IV – 2010 I (seasonally
adjusted)

Time Period	(A) Payroll Employment (in millions)	(B) Average Weekly Hours
2008 IV	112.456	34.30
2010 I	107.217	33.96
Absolute Change	-5.239	-.34
Percent Change	-4.7%	-1.0%

A stable level of real aggregate private output accompanied by a decline in aggregate hours of work of about 5.6 to 5.7 % could only have been possible if labor productivity in the nonfarm private sector rose.⁷ Data on trends in the Index of Labor Productivity in the U.S. from 2007 IV to 2010 I are presented in Chart 2. Between the fourth quarter of 2008 and the first quarter of 2010, the index of labor productivity (output per worker hour) rose from 144 to 153.2, a gain of 6.4% (Chart 2). This 15 month gain in labor productivity was the best performance in the past 45 years. It was generated by a massive shedding of both workers and aggregate work hours, increasing the number of unemployed and underemployed to nearly 24 million at the end of 2009 and raising the ranks of the hidden unemployed and the mal-employed.

⁷ The U.S. Bureau of Labor Statistics' Index of Aggregate Weekly Hours in the Private Sector fell from 96.7 to 91.3 between 2008 IV and 2010 I, a decline of 5.6%

Chart 2:
Trends in the Index of Labor Productivity in the U.S. from
2007 IV to 2010 I (Output per Hour, 1992 = 100)



Percent Change in
Labor productivity = 6.4%
From 2008 IV to 2010 I

This rise in labor productivity does not automatically convert to an increase in corporate profits. The gains could be shared with workers in the form of higher real wages and employee benefits, with consumers in the form of lower prices, and with government in the form of higher excise taxes, payroll taxes, or sales tax receipts. Findings below on changes in the real (inflation adjusted) weekly wages of U.S. workers show no increase over the 2008 IV to 2010 I time period. Workers did not share in these productivity gains.

There are several sources of data on the weekly earnings of workers in the U.S. One source of data is the BLS national estimates of the nominal mean weekly earnings of all employed wage and salary workers in the private nonfarm sector. Between the fourth quarter of 2008 and the first quarter of 2010, the average (mean) weekly earnings in current dollars of U.S. private sector wage and salary workers rose from \$752 to \$763, a gain of only \$11 or 1.5%. Over the same period the Consumer Price Index for All Urban Consumers (CPI-U) increased by

1.9%, more than offsetting the rise in the nominal weekly earnings. Thus, real mean weekly earnings of private sector, wage and salary workers fell by about 0.5%.

Table 7:
Changes in the Nominal and Real Mean Weekly Earnings of All Private Sector Employed Wage and Salary Workers in the U.S., 2008 IV to 2010 I

	(A)	(B)	(C)
Time Period	Weekly Earnings in Current Dollars	Consumer Price Index (1982-84=100)	Real Weekly Earnings (1982-84 Dollars)
2008 IV	752	213.7	352
2009 IV	756	216.8	348
2010 I	763	217.6	350
Absolute Change	+11	+3.9	-2
Percent Change	+1.5%	+1.9%	-.5%

A second source of data on the weekly earnings of U.S. wage and salary workers is that generated by the CPS household survey. Estimates of the median weekly earnings of full-time workers (private and public) over the same 2008 IV to 2010 I period are displayed in Table 8. The median weekly earnings in current dollars increased from \$728 in 2008 IV to \$748 in 2010 I, a gain of \$20 or 2.7%. As noted above, the Consumer Price Index rose by 1.9% over this time period. Thus, the real median weekly wage for full time workers increased by less than one percent. Including the percentage shift in part time workers in these calculations would have modestly reduced the real weekly earnings estimate. Overall, the evidence clearly reveals that the average wage and salary worker received no increase in higher real weekly earnings over the 2008 IV – 2010 I time period. The gains in labor productivity went to boost profits, not real wages.

Table 8:
Changes in the Nominal and Real Median Weekly Earnings of Full Time Employed Wage and Salary Workers, 2008 IV to 2010 I

Time Period	(A) Median Weekly Earnings in Current Dollars	(B) Consumer Price Index	(C) Median Real Weekly Earnings
2008 IV	728	213.7	341
2009 IV	749	216.8	345
2010 I	748	217.6	344
Absolute Change	+20	+3.9	+3
Percent Change	+2.7%	+1.9%	+8%

The Explosive Rise of the U.S. Unemployment Rate Relative to Other Industrialized OECD Countries Between 2007-2009

At the end of the economic boom of the 1990s decade, the U.S. had achieved its lowest unemployment rate since the late 1960s and one of the lowest unemployment rates in the OECD organization. In 2000, the unemployment rate of the U.S. was only 4.0%, the second lowest among ten OECD countries for whom the U.S. Bureau of Labor Statistics has adjusted their national unemployment rates to make them comparable to the U.S. definition of unemployment (Table 9). Even in 2007, the U.S. performed comparatively well, with its unemployment rate of 4.6% being the fourth lowest among these ten OECD countries and in a near statistical tie with Australia for third lowest.

From 2007 to 2009, however, the unemployment rate of the U.S. doubled in size, rising from 4.6 to 9.3 percent. This increase was at least twice as high as any of the other OECD nations and was 4 or more times higher than five of these nations. The unemployment rate of Germany actually fell despite a larger drop in its GDP. By 2009, the U.S. had the highest unemployment rate of these ten countries.

Table 9:
Overall Unemployment Rates of Ten OECD Countries in 2000, 2007, and 2009
(in %)

	(A)	(B)	(C)	(D)
Country	2000	2007	2009	Change, 2007 – 09
U.S.	4.0	4.6	9.3	+4.7
Australia	6.3	4.4	5.6	+1.2
Canada	6.1	5.3	7.3	+2.0
France	8.5	7.9	9.1	+1.2
Germany	7.8	8.7	7.8	-.9
Italy	10.2	6.2	7.9	+1.7
Japan	4.4	3.6	4.8	+1.2
Netherlands	3.0	3.2	3.4	+.2
Sweden	5.8	6.1	8.2	+2.1
United Kingdom	5.5	5.4	7.7	+2.3
U.S. Rank	Second Lowest	Fourth Lowest	Highest	Highest

Source: U.S. Bureau of Labor Statistics, “International Statistics on Labor Force Developments “10 OECD Nations.”

The behavior of the U.S. unemployment rate, moving from second lowest in 2000 to highest in 2009, leads credence to the second half of the saying of St. Matthew in Chapter 19, Verse 30.

“That the first shall be last, and the last first”.

The steep drop in employment in the U.S. during the Great Recession led to this high rise in the unemployment rate and the accompanying increase in underemployment. Hours of work declined much more rapidly than output fell, pushing up labor productivity. The gains in productivity did not go to labor but to increasing corporate profits.

Table 10:
Unemployment Rates of Men in Ten OECD Countries in 2000, 2007, and 2009
(in %)

	(A)	(B)	(C)	(D)
Country	2000	2007	2009	Change, 2007 – 09
U.S.	3.9	4.7	10.3	+5.6
Canada	6.3	5.6	8.5	+2.9
Australia	6.5	4.0	5.7	+1.7
Japan	4.1	3.2	4.4	+1.2
France	7.3	7.4	8.9	+1.5
Germany	7.6	8.6	8.1	-.5
Italy	7.9	5.0	6.9	+1.9
Netherlands	2.3	2.8	3.4	+.6
Sweden	6.2	5.8	8.6	+2.8
U.K.	6.0	5.7	8.7	+3.0
U.S. Rank	Second Lowest	Fourth Lowest	Highest	Highest

The greatest deterioration in the U.S. unemployment rate took place among men largely as a result of the Great Depression in blue collar jobs (Table 10). In 2000, the unemployment rate of men in the U.S. was only 3.9%, the second lowest of these 10 OECD nations. By 2007, the unemployment rate was only 4.7%. The rate of unemployment among men jumped to 10.3% in 2009, the highest of the ten OECD nations, and the U.S. was the only nation with a double-digit unemployment rate for men in that year. No other of these OECD countries came close to matching this extraordinary rise in male unemployment.